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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,800	08/19/2003	Edward Krainer	0192-PA	5188

7590 08/23/2005
CROMPTON CORPORATION
Benson Road
Middlebury, CT 06749

EXAMINER

SANDERS, KRIELLION ANTIONETTE

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,800

Applicant(s)

KRAINER ET AL.

Examiner

Kriellion A. Sanders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-13 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/19/03, 11/19/04</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Applicant's claims are directed to a method for stabilizing a halogenated polymer by including a mixture of at least one polyalkylene glycol as depicted in the present claims in combination with a metal salt of a strong acid that is selected from the group consisting of:

Perchloric acid

Trifluoroacetic

Trifluoromethanesulfonic

Alkylsulfuric

Phosphotungstic

HPF₆

HPF₄

HSbF₆

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al, US Patent No. 6048831 in view of Maeda et al, US Patent No. 5880234.

The invention to Mori et al relates to a surfactant composition comprising (a) a nonionic surfactant represented by the following general formula (I) and (b) an anionic surfactant at a

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combined weight ratio ranging from 99/1 to 10/90. The invention relates to the finding that a composition containing an anionic surfactant can exhibit a low viscosity even with a high surfactant concentration, by using a polyalkylene glycol-base nonionic surfactant when combined with an anionic surfactant to thereby reduce the viscosity build-up due to the anionic surfactant.

The anionic surfactant to be used in the invention as the component (b) includes alkylsulfuric acid salts, alkyl ether sulfuric acid salts, alkane-sulfonic acid salts, alkylsulfofatty acid salts, dialkylsulfosuccinic acid salts, alkylbenzenesulfonic acid salts, alkylphosphoric acid salts, fatty acid soaps, carboxymethylated polyoxyethylene alkyl ethers, .alpha.-olefinsulfonic acid salts, and .alpha.-sulfofatty acid salts, though it is not particularly limited. The anionic surfactant is preferably one selected from among alkylsulfuric acid salts, alkyl ether sulfuric acid salts, alkanesulfonic acid salts, alkylsulfofatty acid salts, dialkylsulfosuccinic acid salts and so on. Ethanol, isopropyl alcohol and propylene glycol exhibit an excellent viscosity reducing effect and are excellent in safety, thus being favorably usable as the above viscosity depressant. The preferable amount of the viscosity depressant to be added is 0.1 to 10 wt. %.

See col. 2, line 2 through col. 4, line 54.

The Maeda et al invention relates to a curable fluorine-containing copolymer and a coating liquid composition containing the copolymer. In the Maeda et al invention, the copolymerization may be conducted by radical emulsion polymerization using an emulsifying agent. This emulsifying agent may be an anionic or nonionic emulsifying agent. Examples of the anionic emulsifying agent are alkylbenzenesulfonate, alkylsulfate,

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polyoxyethylenealkylphenolsulfate, styrenesulfonate, vinylsulfate, and derivatives of these.

These salts may be produced by the interaction of the acids (e.g., alkylsulfuric acid) and bases (e.g., alkali metal hydroxides and volatile bases). In the preparation of the coating composition, it is optional to add other additives such as pigment, dye, ultraviolet absorbing agent, light stabilizer, rust preventive agent, dispersant, antisagging agent, coalescing agent, antifungus agent, and antifreezing agent. Furthermore, it is optional to add other resins such as fluorine-containing polyols, other fluororesins that contain alkoxysilyl group, acrylic silicone resins, acrylic polyols, polyvinyl esters, silicone compounds, polyalkylene glycols, and alkyd resins. See col. 11 line 38 through col. 12 line 14.

It is well known in the art that a surfactant is an agent that changes the nature of a surface and may be used as an emulsifier.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to employ a polyalkylene glycol-base nonionic surfactant of Mori et al in conjunction with an anionic surfactant selected from among the alkylsulfuric acid salts of Mori et al in the compositions of Maeda et al to function as the emulsifying agents described therein.

Allowable Subject Matter

3. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Information Disclosure Statement

References cited on form 1449 that do not indicate a month and year of publication have been crossed through.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kriellion A. Sanders whose telephone number is 571-272-1122. The examiner can normally be reached on Monday through Thursday 6:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kriellion A. Sanders
Primary Examiner
Art Unit 1714

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